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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,395	10/27/2000	Topi Koskinen	460-009824-US(PAR)	2829

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EXAMINER

SEFCHECK, GREGORY B

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/697,395

Applicant(s)

KOSKINEN ET AL.

Examiner

Gregory B Sefcheck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Drawings

1. The drawings are objected to because of the reasons stated on the accompanying PTO-948 form. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 1-10 objected to because of the following informalities:
 - Claims 1-10 pertain to a method but fail to specify positive, sequential steps in the body of the claims.Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
4. Claims 8 and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to enable one skilled in the art to

which it pertains, or with which it is most nearly connected, to make and/or use the invention.

- Claims 8 and 21 specify the use of a "no operation" command (NOOP).
The function or significance of using this specific command is not described in the specification.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4, 6-14, 16-19 and 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Frid et al. (US006560239B1), hereafter Frid.

- In regards to Claim 1-2, 8-11, 16, 18 and 21-22,

Frid discloses a method, system and terminal for retaining a packet (first) connection in a wireless system during a circuit-switched (second) connection to the wireless terminal (Title; Abstract; claim 9 – first connection is a packet connection and second connection is a circuit-switched connection; claim 10/16/22 – terminal is a wireless terminal and network is a mobile communication network).

Referring to Fig. 3, Frid shows establishing a first connection between a terminal and a packet-switched network (302-310; claim 1/11/18 – means for setting up first connection between network and terminal).

Frid further shows a setting up of a second connection between the terminal and the network (312-316; claim 1/11/18 – means for setting up second connection between network and terminal).

Frid shows that the terminal sends a message (318) for interrupting the first connection, but maintaining the first connection protocol, while accepting the second connection (320-336; claim 1/11/18 – means for interrupting the first connection for the time of the second connection; claim 1/11/18 – means for setting up a message for maintaining the first connection in connection with setting up of the second connection; claim 1 – setting up the message maintaining the first connection is started in the terminal; claim 2 – message for maintaining the first connection is generated in the terminal and transmitted from the terminal to the network; claim 8/21 – maintenance message is supplemented with a “no operation” command)

- In regards to Claim 3 and 13,

Frid discloses a method and terminal for retaining a packet (first) connection in a wireless system during a circuit (second) connection that covers all limitations of the parent claims.

Frid shows that the network maintains the parameters of the first connection (claim 3/13 – message for maintaining the first connection is generated in the network) following receiving an acceptance message from the terminal for the second connection (Fig. 3, 318-322; Col. 7, lines 32-65; claim 3/13 – means for setting up message for maintaining the first connection is started by transmitting information about interrupting the first connection from the terminal to the network).

- In regards to Claim 4 and 14,

Frid discloses a method and terminal for retaining a packet (first) connection in a wireless system during a circuit (second) connection that covers all limitations of the parent claims.

Referring to Fig. 3, Frid shows that the method and terminal receives a message requesting to set up a second connection (316; claim 4/14 – means to receive message to setup second connection at the terminal).

Frid further shows that the acceptance of the second connection (324) is transmitted from the terminal to the network after the maintenance information for the first connection is transmitted (318-320; claim 4/14 – means for transmitting reply message to the request for the second connection from terminal to network after the message for maintaining the first connection is transmitted).

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- In regards to Claim 6-7 and 19,

Frid discloses a method and system for retaining a packet (first) connection in a wireless system during a circuit (second) connection that covers all limitations of the parent claims.

Frid shows that the first packet connection may be communicate information between the network and a termination endpoint, such as the Internet or a server on a LAN (Col. 1, lines 27-35; Col. 5, lines 20-30; claim 6/7/19 – network communicates with a LAN/Internet; claim 6/7/19 – first connection is between terminal and server in LAN/Internet)

When the second connection is accepted and the maintenance of the first connection is set up, the maintenance message is received at the termination endpoint (Fig. 3, 318-322; Col. 7, lines 57-65; claim 6/7/19 – network transmits maintenance message to server/Internet).

- In regards to Claim 12,

Frid discloses a terminal for retaining a packet (first) connection in a wireless system during a circuit (second) connection that covers all limitations of the parent claims.

Frid shows that the terminal is equipped to generate and transmit a message to the network indicating that the first connection is to be maintained during a second

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connection (Fig. 3, 318-322; Col. 7, lines 18-55; claim 12 – means for generating and means for transmitting the message for maintaining the first connection).

- In regards to Claim 17,

Frid discloses a terminal for retaining a packet (first) connection in a wireless system during a circuit (second) connection that covers all limitations of the parent claims.

Frid discloses a terminal that comprises circuitry for processing (processor; claim 17 – terminal comprises a data processor) messages for the retention of a first connection for the duration of a second connection (Fig. 3, 318-322; Col. 11, lines 6-31; claim 17 – means for setting up message for maintaining the first connection are arranged in the data processor).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5, 15, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frid in view of Chen et al. (US006198945B1), hereafter Chen.

- In regards to Claim 5, 15 and 20,

Frid discloses a method, system and terminal for retaining a packet (first) connection in a wireless system during a circuit (second) connection that covers all limitations of the parent claims.

Frid does not explicitly show selecting and adding a telephone number to the message for setting up the second connection. Frid also does not show transmitting the maintenance message for the first connection after selecting the telephone number but before setting up the second connection.

Chen discloses a method and system that enables a mobile terminal to place a first connection on hold while initiating a second connection by selecting a telephone number and adding that number to a message for setting up a second connection (Fig. 3, Col. 6, lines 15-63; claim 5/15/20 – means to select and add a telephone number to message for setting up the second connection; claim 5/15/20 – message maintaining the first connection is transmitted after the selection of a telephone number, before setting up the second connection)

It would have been obvious to one of ordinary skill in the art at the time of the invention to select a telephone number for setting up the second connection before maintaining the first connection and setting up the second connection, as shown by Chen. This modification would allow a first connection to be maintained during either an incoming or an outgoing second connection.

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9. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frid.

- In regards to Claim 23,

Frid discloses a system for retaining a packet (first) connection in a wireless system during a circuit-switched (second) connection to the wireless terminal that covers all limitations of the parent claim (Title; Abstract).

Frid does not explicitly show the first packet connection to be a GPRS packet connection

Frid discloses a system with a first packet connection for data communications according to the PPP protocol. Clearly, the principles of the connection retention system could be applied to any mutually-understood computer communications protocol (Col. 2, lines 46-47; claim 23 – first connection is a GPRS packet connection and second connection is a circuit-switched connection)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Frid's system of retaining a variety of first packet connections, such as implemented by general packet radio service (GPRS), thus providing the flexibility of connection retention during a second connection for various types of packet connection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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- Burg (US 20020097710A1) discloses a method and system for processing a telephone call while on-line
- Forslow (US006608832B2) discloses common access between a mobile communications network and an external network with selectable packet-switched and circuit-switched services
- Barany et al. (US006594252B1) discloses locating control signals in a mobile communication system
- Lippincott (US006577722B1) discloses call waiting response status
- Dowling et al. (US006574239B1) discloses a virtual connection of a remote unit to a server
- Hjelm et al. (US006529497B1) discloses channel allocation and release for packet data services
- Smock et al. (US006377668B1) discloses an internet priority call device
- Norris et al. (US006353611B1) discloses a call waiting feature for a telephone line connected to the internet
- Belzile (US006253249B1) discloses a method and device for bridging data and telephone networks
- Macauley et al. (US006188886B1) discloses a server based voice call offer while telephone in data session
- Dahlin et al. (US006122263A) discloses internet access for cellular networks
- Battle (US006081592A) discloses an automatic call-work director

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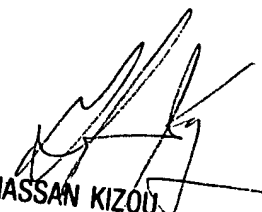
- Hietalahti (US005995825A) discloses a radio telephone system in which a mobile phone can receive a control message announcing the arrival of a new call during an ongoing call
- Foladare et al. (US005982774A) discloses internet on hold
- Goldman et al. (US004995074) discloses a switched line modem interface system

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory B Sefcheck whose telephone number is 703-305-0633. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

GBS
1-20-2004


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